

FY 1998 End of Year Report

Region 5 Environmental Actions for Children's Health (REACH)

OBJECTIVES:

- To identify and evaluate children's health issues in Region 5.
- To develop approaches for addressing these issues.
- To prioritize and implement appropriate actions on children's health issues.

GOAL #1: Define the children's environmental health issues specific to Region 5 that will be the focal points of effort by the REACH Workgroup.

Action #1: Screen the available literature, references, and sources of information, both at Headquarters and in the Region, on environmental impacts to children's health in order to identify the environmental health issues that affect children in Region 5.

Results: A major output of this action in FY 98 was the development of the following protocol for how the literature search will be accomplished and to more discretely define the usability of the end product.

The goal of the literature screening is to evaluate the toxicology/epidemiology literature on children's health in order to identify environmental exposures that have significant impact on children's health in Region 5. The approach that is being used to examine significant environmental exposures to children in Region 5 was developed in order to fulfill the following criteria: 1) Multiple uses and applications of the end product developed through the literature search. The end product should allow the information to be viewed from either a specific chemical, media, disease, or regulatory perspective, which would make the final product of greater use to the Agency; 2) The approach should allow the project to be completed in phases, with a Phase I end product to be completed in FY'99; 3) Resources expended on the literature review should not exceed .5 FTE. The approach should consider the high volume of papers that will need to be reviewed and should limit the scope. Based on these criteria, an approach is described as follows:

- 1) A list of chemicals that constitute significant health risks for children is being developed through the use of parallel lists such as the 20 priority hazardous chemicals list from the Agency for Toxic Substances and Disease Registry (ATSDR) and the list of critical pollutants for the Great Lakes.
- 2) Findings from scientific literature on children's health and other sources of information will be summarized for each chemical on the list using a reporting matrix.
- 3) A summary matrix or database will be completed using the information from the reporting matrix. The summary matrix will identify key areas of

environmental exposure for children including: a specific chemical/physical exposure, an exposure medium (i.e., air, water, soil, food), toxicity information, known or possible health outcomes, and whether current EPA policy or regulations are protective.

Applications: A database which contains information on environmental exposures that have significant impacts on children's health in Region 5 has a variety of applications which include:

1) Focusing the efforts and resources of Region 5 on high priority environmental health threats for children in Region 5.

- First, this will allow the REACH Workgroup to set priorities in order to plan for short term and long term resource allocation.
- Second, this database will help alert Region 5 staff on particular environmental exposures that should be "red flagged" in situations where children are involved. Therefore, this list will highlight certain situations at sites that should receive extra attention when children are potentially exposed.

Action #2: Set priorities for children's environmental health issues identified in Action #1. This will allow planning for short-term and long-term resource allocation.

Results: See Action 1 report.

Future Actions: See results.

Action #3: Identify the locations of "zones of elevated contaminant concentrations" (for contaminants that are identified as a children's environmental health issue, as identified in Goal #1) and "zones of disease" for further investigation and outreach activities, using GIS mapping and available data. Include state and local agencies as a partner in this effort.

Results: A Human Health GIS Workgroup was formed in response to needs of the Children's Health and Environmental Justice Teams needs for human health data in a spatial format. They have initiated the gathering of data for elevated blood lead, asthma, birth defects and cancer in children and have begun the process mapping this information. Another project currently underway is determining the effects of TRI emissions on children in NW Indiana and Chicago. An additional portion of the TRI analysis will be developed for the Chicago area. Estimates of asthma prevalence in children by Chicago neighborhood is currently available in arcview. Argonne is working closely with us to produce GIS maps from cancer and asthma hospitalization data for Chicago children. Finally, an initiative has started with Walgreens to gather data by zip codes on asthma pharmaceuticals as an indicator of asthma prevalence in the Chicago area.

The biannual GIS in Public Health conference occurred August 17-20, 1998. The blood lead data and the childhood asthma estimates were presented. Several talks alluded to children's health issues as shown through GIS, including groups who have projected the occurrence of several childhood ailments nationally in areas as small as zip codes. With the intent of using childhood blood-lead screening data as an environmental indicator, the six state health departments were contacted in early 1998 to request their assistance in compiling a region wide database and series of GIS maps that would provide a planning and targeting tool for continued efforts aimed at further reducing childhood lead poisoning. Each state agency provided requested information for 1996/97 regarding the incidence of reported cases of elevated blood-leads in children under age six by county and by zip code. This was then combined with information about childhood blood-lead screening rates (as a percentage of all children) for each geographic area, and all of the information was then aggregated and mapped for each state as well as for the region as a whole. The resulting report is the first of its kind, and this pilot will serve as a model as Region 5 proceeds with its plans to map additional children's health endpoints in the coming years.

Future Actions: In FY 99, the REACH Team will continue to focus on identifying children's health issues in the Region. In Phase I of this project, information on "environmental impacts to children's health" will be examined in order to identify a list of 20 chemicals that most significantly impact children's health in Region 5.

GOAL #2: Increase awareness and understanding of children's health issues in Region 5.

Action #1: Host a workshop on "Children at Risk: Environmental Issues in the Great Lakes" in order to disseminate and share current information regarding the nature of environmental risks to children in Region 5. The workshop would be primarily technical in nature, with a focus on health impacts to children due to environmental threats. The target audience would be U.S. EPA staff, States, environmental community groups, parents, and stakeholders. A second workshop on children's health would focus on practical aspects of children's health issues and would include water quality issues, pesticides, and pollution prevention.

Results: On July 8-9, 1998, a two day conference, "Children at Risk: Environmental Health Issues in the Great Lakes Region" was held in Chicago. This U.S. EPA Region 5 effort was co-sponsored with the EPA Office of Children's Health Protection and ATSDR. The specific goals of the conference were to: 1) increase awareness and understanding of children's health issues in Region 5; 2) create an effective forum for discussion between national experts and leaders on children's health issues; and 3) generate networks between U.S. EPA-Region 5 and environmental and public health agencies, the medical community, industry, environmental and community groups, and other stakeholders that can be used in future collaborative efforts to reduce children's health risk. The agenda covered many of the children's health issues that have been highlighted as national and local children's health priorities including childhood cancer, childhood asthma, and developmental effects of environmental contaminants (specifically

lead, pesticides, and PCBs), medical interventions, and the nature and adequacy of environmental and public health programs for addressing the health issues. Prominent speakers included Dr. Lynn Goldman, Assistant Administrator of the Office of Prevention, Pesticides, and Toxic Substances, and Dr. Barry Johnson, Assistant Administrator, ATSDR. Attending the conference were approximately 270 people, drawn from a wide variety of stakeholders, including representatives of local health departments, environmental and local health group representatives, and medical professionals.

Future Actions: The Science subgroup and individuals outside of the REACH workgroup are designing a workshop for the summer of FY'99 that will focus on education, intervention, and prevention measures to remove environmental health threats to children, including asthma, lead, and pesticides.

Action #2: Develop REACH Monthly Seminar Series in order to disseminate and share current information regarding children's health, protective parenting, and child safety issues. The target audience would be U.S. EPA staff, States, environmental community groups, and concerned citizens. The speakers would be health professionals, health care providers, educators familiar with learning/language deficiencies, physicians studying particular children's disorders related to environmental exposures, and local researchers. Input will be solicited from Region 5 staff on topics to be included in this seminar series.

Results: REACH developed a Monthly Seminar Series in order to disseminate and share current information regarding children's health, protective parenting, and child safety issues. The Seminar Series became one part of the Region's effort to implement Administrator Carol Browner's National Agenda to Protect Children's Health from Environmental Threats (1996) and President Clinton's Executive Order to Protect Children from Environmental Health Risks and Safety Risks (1997). It is also recognized as a tool to educate Region 5 staff and outside attendees on the environmental health concerns that affect children. The first seminar was conducted in April 1998 and was a roll out of the REACH Workgroup's Agenda for Action. REACH and the Air Division's Asthma Workgroup combined efforts and conducted four seminars on asthma. The audience was U.S. EPA staff, physicians, States, environmental community groups, and concerned citizens. The speakers were health professionals, health care providers, and educators.

Future Actions: REACH and the Federal Women's Program and its subcommittees are also combining efforts in early FY 99 and will hold seminars on issues related to children's health and safety. Input has been solicited from Region 5 staff on topics to be included in this seminar series.

Action #3: Develop a collection/list of key EPA publications related to children's health available for distribution (e.g., public meeting, workshops, Earth Day festivals). Evaluate

current outreach materials and develop new materials (such as software, videos, fact sheets, etc.) and/or revise existing materials.

A fact sheet which summarizes children's health issues will be developed/marketed. Materials will be developed that will inform homeowners, parents, and educators on pertinent children's environmental health issues. A brochure related to Great Lakes fish consumption will be developed/marketed to provide information for nursing/pregnant women.

Results: The workgroup created a children's health display, complete with photographs and a collection of Regional publications that relate to children's health, for our outreach activities.

We conducted a review of existing Agency materials on children's health and developed a document listing those Region 5 resources. The document contains a list of publications on lead, asthma, radon, pesticide safety, and other resources that are available to the public. This document has been very useful at our outreach events.

We conducted an assessment of Region 5 states that have programs, brochures, or fact sheets on fish consumption in connection with our plans to develop a fish consumption brochure for pregnant women and nursing mothers.

Future Actions: The completion of the fish consumption brochure will be a focus for FY'99.

Action #4: Participate in conferences related to children's health issues. This includes developing a display and distributing publications at the American Public Health Convention in November 1997.

Results: In November, 1997, REACH workgroup members staffed a booth at the American Public Health Convention in Indianapolis, Indiana. Information related to children's health issues such as asthma, ozone, lead, asbestos, pesticides, and pollution prevention was displayed.

In April 1998, members of the Outreach subgroup staffed a booth at the Harold Washington Library during Kids' Week, which was sponsored by HHS. The program included lead prevention activities, information on nutrition and exercise for kids, and lead screening and immunizations.

In the summer members of the workgroup staffed a booth in St. Charles, Illinois, at a conference attended by local boards of health.

Future Actions: Since October is Children's Health Month, REACH will set up a booth in the lobby of the Metcalfe Federal Building during the week of October 19-23, 1998. We have also invited other federal agencies in the area to join us.

Action #5: Participate in Speaker's Bureau.

Results: Several presentations, especially those which were done by the DRA, Michelle Jordan and by other regional staff during the course of the year focused on our initiative to protect children's health,

Future Actions: Members of REACH will continue to discuss our efforts as opportunities present themselves.

Action #6: Place children's health information on the Region 5 webpage and include links to other related resources.

Results: The REACH workgroup developed an Intranet web page to promote the goals and actions of the Children's Health Initiative to Region 5 staff. The Intranet site consists of links to the REACH Goal and Action Plan and information on our monthly seminars and identifies other informative websites. Copies of our meeting minutes can also be found on the Intranet site. The Intranet site has been referenced in every "ALL EPA" message that has gone out to Region 5 staff on messages relating to Children's Health. Although no consistent or detailed statistics are available for the Intranet, periodic "snap shots" in time are available. On August 11, 1998, The Children's Health Intranet Index page received 53 visitors who spent an average of 2 minutes, 25 seconds on the index page. The Goals and Action Plan received 16 hits. The Reach Survey received 15 hits. The REACH workgroup also put together an Internet web page for the "Children At Risk: Environmental Health Issues in the Great Lakes Region" Conference. The main Conference page received 1,335 hits between April and July.

Future Actions: A general Children's Health Internet page is under construction and should be available shortly.

Action #7: Develop training sessions that are specific to community needs in order to support EPA programs and teams (e.g., citizen's academy to include children's health component).

Results: This effort will be completed in FY'99.

Future Actions: The training will consist of a one day workshop for Region 5 staff and a half-day session for management. The time frame will be January/February 1999. The session will include information on children's health issues and activities from a national perspective, as well as provide more specific information on how Region 5 has been and will be addressing children's health issues through the Region 5 Children's Health Initiative. The sessions will be interactive and action-oriented, with the intent to create dialogue among participants and facilitators. Participants will be encouraged to bring their own experiences to the workshop and to brainstorm on how to integrate what they've learned into their daily work activities. The sessions for management will involve a summary of key scientific and policy issues as well as include summaries of

feedback and dialogue generated during sessions with staff. Our objective is to not only facilitate basic understanding of children's health issues, but also to have participants consider how their actions can impact children's health, and to create action-oriented dialogue on children's health. We hope to 1) increase awareness and provide a more informed perspective on the importance of children's health issues in Region 5; 2) provide Region 5 staff and management with current information on national and regional children's health issues; 3) create a forum for discussion of children's health issues in Region 5; 4) initiate the formation of networks between REACH and Region 5 programs and teams.

GOAL #3: Support and coordinate with existing National, State, and local outreach and scientific efforts on children's health.

Action #1: Maintain regular contact with the HQ Office of Children's Health Protection (OCHP) to ensure that our efforts are complementary. Provide support for national initiatives, including the Child Health Champion Campaign.

Results: During FY 98-99 the regions are working jointly with the Office of Children's Health protection to develop Child Health Champion (CHC) Communities. The CHC Campaign is a program initiated by USEPA to empower local citizens and communities to take steps toward protecting their children from environmental health threats. The Campaign has been developed to meet the requirements established by EPA's 1996 National Agenda to Protect Children's Health from Environmental Threats as well as President Clinton's 1997 Executive Order on the Protection of Children from Environmental Health and Safety Risks.

The first step of the Campaign is a pilot effort to establish partnerships with community teams and learn what information is needed by the community. This might include better ways to convey information, sustainability issues, and what tools work in different communities. Eleven communities were selected and the announcement was made by First Lady Hillary Rodham Clinton on May 21, 1998.

Region 5 selected the City of Milwaukee as its CHC Community. The city has selected two neighborhoods, one on the near north (primarily African-American) and the other on the near south side (primarily Hispanic) as areas in which to develop this community based project. The community has established an initial team with the participation of different organizations. The Sixteenth Street Community Health Center has emerged as the leader for the first part of the Cooperative Agreement. The goal is for the community to organize itself in a manner that will allow it to become self sustaining in protecting children's health. The city has selected asthma as the disease to focus its attention on based on a process that the community leaders, especially in the educational and medical arenas, had been assessing for the previous year. The Office of Children's Health Protection (OCHP) is providing a total of \$135,000 to each region for this pilot. To date, \$35,000 has been awarded to the 16th St. Clinic in FY 98 funds. The Air and Radiation Division provides the project officer for the grant.

The region supported the development of and has regularly participated in conference calls among the Regions' children's health contacts. In these calls we have shared what the regions are doing in children's health as a way to develop a network and to share ideas on future directions. The calls are led by the lead region for children's health which has just transferred to Region 6 from Region 3.

Future Actions: In working with Milwaukee it seems clear that additional funds would be useful to carry out one of several possible projects that could be related to air monitoring, Integrated Pest Management (IPM) in schools, implementing Tools for Schools, or other projects. Ultimately the goal of the CHC project is that communities find ways to become self sustaining as CHC communities but we recognize the need for seed funding for the first 1-3 years to provide support until sustainability is accomplished. The community team will initially focus on childhood asthma and will work in two to four schools in the areas to provide a comprehensive program for asthmatic students by helping them identify their triggers and prepare an asthma management plan. Also, in response to our recommendation, implementation of the Tools for Schools program will be added to the plan. Region 5 supports the community by participating in meetings, gathering information, providing expertise, and assuring that there is an environmental focus and consideration as decisions are made and activities are developed by the team. In FY 99 OCHP will make an additional \$100k available.

Action #2: Develop a list of Federal, State, and community contacts in order to coordinate scientific and outreach efforts. Set up regular communication network with these contacts.

Results: For our outreach efforts, we compiled a list of contacts in Region 5 of agencies and organizations that may be interested in participating in children's health activities.

REACH has become an active participant in the Federal Interagency Task Force on Children's Health Outreach, created by Presidential Directive dated 2/18/97, which provides for a coordinated Federal/State partnership aimed at enrolling the children of working poor families in the new national Children's Health Insurance Program. Federal Agencies participating in the Task Force include the following departments: Health & Human Services, Agriculture, Education, Housing & Urban Development, Interior, Labor, Treasury, and the Social Security Administration. This forum has created unique opportunities for both cross-training and information exchange and will help REACH to identify children at-risk and better enable the targeting of education and outreach activities to those communities in greatest need.

Future Actions: A mapping workgroup has recently been formed as an adjunct to the Task Force to more specifically serve this purpose and to help identify priority children's health issues throughout the Region.

Action #3: Coordinate with State and City Health Departments to collect data in order to assess lead exposure to children throughout Region 5. The purpose of the proposed data bank would be to target specific communities for Agency action.

Results: See Goal 1 Action 3

Future Actions: During FY'99 REACH will focus attention on developing definitive relationships with our State Lead Agencies, including Health, Environmental and Agriculture and with our Tribes to coordinate our children's health activities and develop partnerships around mutual interests.

Goal #4: Provide technical and analytical tools for Regional decision-making on children's health issues.

Action #1: Develop a Regional guidance document to be used in decision-making regarding environmental health risks to children: "Regional Guidelines for Considering Environmental Health Risks to Children."

Results: No effort in FY'98.

Future Actions: Attention to this action will begin in FY'99.

Action #2: Present educational programs/information sessions on children's environmental health issues. The target audience would be Region 5 staff.

Future Actions: This is a FY'99 activity

Action #3: Disseminate information related to children's health issues of national and regional significance to appropriate Region 5 management and staff.

Results: See Goal 2, Action 2. In addition to the monthly seminar series, the REACH workgroup has shared information with managers as it has become available through the children's health workgroup members and others.

Future Actions: This will be an ongoing activity for FY'99

Action #4: Based on priorities identified in Goal #1 (Action #3), collaborate with affected media-based programs and teams to reduce environmental health risks to children.

Results: Until the completion or at least further progress on the literature search is completed progress on this action will not occur.

Action #5: Encourage incorporation of appropriate Supplemental Environmental Projects (SEPs) into enforcement settlement agreements; compile a list of recommended SEPs.

Results: In 1998 ORC reached an agreement with R.R. Donnelly in a RCRA enforcement case which, for the first time in the Region, included a requirement to perform SEPs which are designed to protect children. These SEPs included a requirement to properly eliminate lead-based paint in a plant work area employing many women of child-bearing age, and donating 13 tons of bound recycled paper to local area schools.

Future Actions: ORC and the regional enforcement programs will continue to look for opportunities for enforcement programs to support children's health.

Goal #5: Support an Agency research program that pursues research in environmental aspects of children's health and disease specific to Region 5.

Action #1: Define Region 5 research priorities and needs on children's environmental health.

Results: No effort in FY 98.

Future Actions: This action will progress as the literature search in Goal 1 is productive.

Action #2: Develop a list of Regional research needs on children's health and compare to the existing ORD research efforts to determine if Region 5 research needs are being met.

Results: This effort is just beginning with other regions in FY99.

Future Actions: See results.

Action #3: Compile a list of grants that have been issued in Region 5 over the last few years that relate to children's health and coordinate with Regional grant program leads to identify ways to integrate children's health priorities into existing grant programs.

Results: A compilation of grant funding sources was developed by the outreach workgroup. We are also providing input to a Lead Program workgroup that compiled a three region database on grants that have been issued in recent years that relate to children's health.

Future Actions: In FY'99 REACH will take a lead role in coordinating with other grant programs in the region to integrate children's health priorities into those programs, where appropriate.